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ABSTRACT

This paper presents a summary of research on outcome-based education (OBE). The first section provides an overview of the evolution and history of OBE in the United States. Other outcome-based models are described in the second section. The third section reviews research on OBE and related concepts, including mastery learning, cooperative education, and peer tutoring. Next, 11 case studies of schools and school districts that have implemented OBE are briefly described. Criticisms are that OBE "dumbs down" the curricula; places more emphasis on student effort rather than achievement; utilizes inaccurate assessment techniques; and allows outcomes to drive the curricula. In addition, fundamentalist Christian groups oppose OBE because they believe it imposes conformity to state-mandated goals, particularly through its emphasis on affective outcomes. In conclusion, OBE has the potential to achieve meaningful reform and create a better learning environment; however, it could be used to indoctrinate beliefs and decrease student achievement in traditional academic disciplines. Although preliminary evidence indicates that the former is the more likely result, several problems remain: (1) the lack of a strong research base; and (2) the inability of school personnel to effectively communicate the rationale for learner outcomes, how outcomes will be achieved, how they will be assessed, and how they will affect students. (Contains 86 references.) (LMI)

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OUTCOME-BASED EDUCATION

Final Report

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THE CALL FOR SCHOOL REFORM

Reformers argue that "public schools designed for the 19th century are incapable of solving the problems that will face us in the 21st century."[1] Trends giving urgency to this view include: international competition and a changing US industrial base; major demographic shifts (the decline of the baby-boomers); and generally disappointing outcomes of the educational system, especially for poor/minority students.[2]

Outcome-Based Education (OBE) incorporates what both Finn (1990) and Cohen (1993) refer to as a paradigm shift in our conception of education:

> Under the old conception..., education was thought of as process and system, effort and intention, investment and hope. To improve education meant to try harder, to engage in more activity, to magnify one's plans, to give people more services, and to become more efficient in delivering them.
>
> Under the new definition, now struggling to be born, education is the result achieved, the learning that takes root when the process has been effective. Only if the process succeeds will we say that education has happened.[3]

Outcome-Based Education theories seemed tailor-made to address the concerns plaguing policy-makers and educators. OBE offers the promise that more students will achieve at higher levels if educational systems are reorganized around desirable student outcomes. It emphasizes knowledge and how it is applied in a real-life setting, rather than concentrating simply on abstract bits of information.

OUTCOME-BASED EDUCATION (OBE), WHAT IS IT?

Outcome-Based Education (OBE), as an instructional system, represents a rejection of the traditional bell-curve view of student performance. OBE systems are based on the notion that all students, not just the brightest, can reach high levels of achievement. Other core beliefs are that success breeds success (success influences self-concept; self-concept

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[1]Darling-Hammond, L. "Achieving Our Goals: Superficial or Structural Reforms?" Phi Delta Kappan (Dec. 1990); 286.

[2]Ibid.

[3]Finn, C.E. "The Biggest Reform of All," Phi Delta Kappan (April 1990); 586.

influences learning and behavior) and that schools control the conditions for success.[4]

As an education reform process, OBE models begin by asking what student outcomes are desirable, and then working backward to determine the curriculum, materials, activities and teaching methods required to achieve those outcomes. In William Spady's words, OBE is a means of "organizing for results, basing what we do instructionally on the outcomes we want to achieve."[5] The concept can be further clarified in terms of three additional principles: clarity of focus, that all efforts are geared toward what kids should demonstrate; expanded opportunity, expanding the ways and number of times kids get a chance to learn and demonstrate what they are expected to learn; and high expectations, that all students are held to high educational standards.[6]

Definitions vary between groups and states. In Idaho, a "performance-based system" of education is one that

> ...focuses on what students are expected to know and be able to do with what they have learned--both by the time they finish school and at various checkpoints ("benchmarks") along the way. From time to time, students are tested to make sure they are progressing satisfactorily toward meeting these high standards.
>
> There are four [main components]: high standards focused on achievement or results; curricular standards (what should be taught); testing and assessment (what should be tested); and increased accountability (reporting results of student achievement).[7]

As a public policy tool, OBE "systems" redefine traditional approaches to accountability. Schools would no longer be held accountable for educational inputs (teacher-student ratios, spending per pupil, etc.) but would be accountable for demonstrating that their

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[4]Murphy, Carol, "Outcome-Based Instructional Systems: Primer and Practice," ERIC Education Brief, Far West Laboratory (1984); 3.

[5]Spady, W., "Organizing for Results: The Basis of Authentic Restructuring and Reform," Educational Leadership (October 1988): 9-10.

[6]Brandt, R. "On Outcome-Based Education: A Conversation with Bill Spady," Educational Leadership (December 1992/January 1993): 66.

[7]Idaho Goals and Testing Commission and Idaho School Reform Committee, "Education Reform in Idaho: Performance-Based Education," Idaho State Department of Education, Boise, ID (February 1994); 1. According to the Idaho State Department of Education, Idaho's Performance-Based Education system differs from Outcome-Based Education (see Idaho Goals and Testing Commission, "Comparing Idaho's Performance-Based Education System to Outcome-Based Education," Idaho State Department of Education (January 1994).

students have mastered important outcomes. To state legislators, OBE meshes nicely with site-based management theories; with OBE, rather than controlling the feed into the education pipeline, policymakers could simply control the output.

EVOLUTION AND HISTORY OF OBE

OBE has its roots in (and is often confused with) a variety of educational reforms and practices. Competency-Based Education (CBE), originally conceived to ease the transition from school to work, contained elements of OBE. However, its proponents were never able to reach a consensus on what "competency" represented. Rather than being accepted as a holistic approach to school reform, CBE survives chiefly as a vocational training program.

The genesis of OBE is evident in Benjamin Bloom's 1968 essay "Learning for Mastery," in which a test, teach, re-test method is encouraged.[8] However, Spady claims that the agenda of Mastery Learning was more success-based than outcome-based; that is, the focus was on creating more success for students learning traditional materials, rather than creating successful outcomes for more students.

Mastery learning and CBE are most similar to what Spady classifies as "traditional" outcome-based education. Traditional OBE is at the base of a "demonstration mountain,"[9] where the most simple of learner outcomes, grounded primarily in subject matter content, are demonstrated by students. These include discrete objectives (small, detailed pieces of information that constitute components in a larger block of content) and structured task performances which use discrete objectives as enablers. At this stage, teachers are essentially employing mastery teaching methods to reach traditional ends (basic knowledge and structured demonstration of knowledge). It is merely that traditional results are redefined as "outcomes" that the system fits under the OBE rubric at all.

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[8]The notion of mastery learning was evident long before Bloom's influential essay. In the 1920s, the Winnetka Plan, developed by Washburne, and a similar scheme at the University of Chicago Laboratory School used a system of object definition, well organized learning units, tests, and remedial instruction for students who needed it. Towers (1992) claims that these methods were discarded as international tensions in the 1940s and 50s changed the emphasis of education to identifying and encouraging the brightest students. Bloom himself was heavily influenced by Carroll, who distinguished between the time needed to learn and the time available to learn; all students can achieve, Carroll asserted, if given sufficient time.

[9]Spady, W., "Choosing Outcomes of Significance," Educational Leadership (March 1994); 18-23.

Midway up the demonstration mountain, transitional OBE requires higher-order competencies (including analyzing concepts and their interrelations, proposing solutions to multifaceted problems, using complex arrays of data and information to make decisions and communicating effectively) and the performance of complex, unstructured tasks. This is generally the type of OBE school reformers have in mind and have attempted to implement (though many fall short of this goal).

The final, transformational stage lies at the peak of the mountain. At this point, traditional curricula and school organization are discarded as the center of the educational system. Students are required to demonstrate what real people do to be successful on a continuing basis in their career, family, and community. This final stage seems to be what most critics of OBE have seized upon as their definition. It opens the door, admittedly, to value-laden curricula and has led many parents to question what the role of schools in our society should be. Transformational OBE has generally not been embraced by school reformers, at least not in any practical way.

OTHER OUTCOME-BASED MODELS

Though one of the leaders of the OBE movement, Spady's conception of OBE is by no means definitive. Mamary's Outcomes-Driven Developmental Model (ODDM) is based on the same premises as Spady's (in particular that all students can learn well), but it focuses much more on structural reorganization. According to its supporters, ODDM is a holistic, total systems approach that develops outcomes based on sound research and the shared philosophy of all stakeholders. Student outcomes are formed and monitored through three main branches of support: administration, community and teacher.[10]

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[10]As an organizational framework, ODDM relies on many of the Total Quality Management techniques espoused by Edward Demings. Several researchers (Rhodes, 1990) advocate the use of Demings model as a tool for school reform. The following organizations distribute materials on their preferred approaches to OBE:

Dr. William Smith (Exec. Dir.)
Network for Outcome-Based Schools
6 Marydale Lane
Brookhaven, NY 11719
(tel: 516/286-0705)

Dr. John Champlin (Exec. Dir.)
National Center for Outcome-Based Education
15429 Richmond Ave.
Fountain Hills, AZ 85268
(tel: 602/837-8752)

Many districts and states have developed their own outcome-based models for school reform. Minnesota, for example, has been praised for its efforts to define learner outcomes and encourage schools to reorganize based on OBE principles.[11] In most states, districts are

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Dr. William Spady (Exec. Dir.)
The High Success Network
P.O. Box 1630
Eagle, CO 81631
(tel: 800/642-1979)

Dr. Albert Mamary (Exec. Dir.)
Partners for Quality Learning
3211 Cynthia Dr.
Binghamton, NY 13903

Outcomes Associates
P.O. Box 7285
Princeton, NJ 08543
(tel: 609/683-0995)

The Center for Peak Performing Schools
(tel: 800/628-1524)

The Video Journal of Education
(tel: 800/572-1153)

[11]For complete discussion, see Division of Instructional Effectiveness, Minnesota Department of Education, "A Minnesota Vision for OBE," 1990 (ERIC #ED329364). Minnesota has codified its OBE reform plan in state legislation. Its outcomes statement reads:

In order to lead productive fulfilling lives in a complex and changing society and to continue learning:

> The graduation shall demonstrate the knowledge, skills, and attitudes essential to: (a) communicated with words, numbers, visuals, symbols and sounds; (b) think and solve problems to meet personal, social, and academic needs; (c) contribute as a citizen in local, state, national, and global communities; (d) understand diversity and the interdependence of people; (e) work cooperatively in groups and independently; (f) develop physical and emotional well-being; and (g) contribute to the economic well-

given latitude to implement outcome-based reforms in the manner and degree they see fit. In fact, since reform is tailored to individual districts and schools, no two OBE systems are entirely alike.

RESEARCH ON OUTCOME-BASED EDUCATION AND RELATED CONCEPTS

OBE is perhaps best described as an educational system; however, it is closely associated (and often confused) with a variety of educational methods that operate within that system. OBE does not necessitate use of any specific method, though some are typically incorporated in OBE reforms.

Evidence on the efficacy of OBE tends to be anecdotal; this is not surprising, considering that OBE proponents discourage basing results solely on traditional assessment techniques, which they claim don't accurately reflect whether and what students are learning. In addition, much more effort has gone into describing OBE theory, OBE implementation and perceptions of OBE than has been expended on investigating the actual results of OBE implementation. Despite these obstacle, the literature does give some clues as to the effect of some teaching methods specifically and OBE systems generally.

MASTERY LEARNING:

All OBE systems incorporate the central thesis that all students can achieve at high levels if given enough time and attention. Mastery Learning models hold achievement constant and treat time as a variable. There are basically three models for mastery learning: the Personalized System of Instruction (PSI) or Keller Plan; continuous progress; and group-based mastery learning or Learning for Mastery. In the two former models, students progress through material alone or in small groups at their own pace. Teachers are present to supplement, rather than guide the learning process.[12] The latter model is the most frequently used in elementary and secondary classrooms. In group based mastery learning, teachers instruct the entire class at the same pace. Students who do not achieve mastery on subsequent tests are remediated through tutoring, peer-mentoring, small group sessions, additional homework, etc.

Most studies and meta-analyses indicate that mastery learning practices are highly effective in raising student achievement. Some individual studies find effects greater than one standard deviation (Bloom, 1986). Two of three major meta-analytical reviews conducted in the 1980s find substantial effects for mastery-learning. Kulik, Kulik, and

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being of society.

[12]Slavin, Robert E., "Mastery Learning Reconsidered," Far West Laboratory, Report No. 7. (Jan 1987). (ERIC #ED294891).

Bangert-Drowns (1986) find mean size effects of .52 for pre-college and .54 for college studies (i.e. pre-college ML students scored, on average, more than 1/2 a standard deviation above their non-ML counterparts). Guskey and Gates (1985) claim mean size effects of .94 at the elementary level, .72 at the high-school level, and .65 at the college level.[13]

Slavin (1987,1990) remains an outstanding critic of mastery learning studies.[14] In 1987, Slavin conducted a "best-evidence synthesis" of ML research. He found essentially no evidence to support the effectiveness of group-based mastery learning on standardized achievement measures. On experimenter-made measures, ML led to moderate achievement gains, with little evidence that effects maintained over time.[15] Slavin criticizes the use of experimenter-made measures as biased, since they are geared toward narrowly defined objectives that don't receive the same attention in traditional classrooms.

In addition, Slavin mentions the following obstacles to group-based ML:

- Since time is structured in our educational system, ML requires either substantial out-of-class efforts, or wastes the time of students who achieve early mastery of subject matter.
- ML may lead to a very narrow focus on only those objectives that are to be tested, to the exclusion of other important content.
- Even for low achievers, spending time to master each objective may be less productive than covering more objectives.

Kulik, Kulik, and Bangert-Drowns (1990) conducted a meta-analysis of findings from 108 controlled evaluations. They find that ML programs have positive effects at all educational levels and effects are stronger on weaker students. Effects vary as a function of procedures used, experimental design, and course content.

Kulik et al. criticize what they see as Slavin's narrow view of ML and ML research.

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[13]As discussed in Slavin,(1987); 3.

[14]Though not necessarily of OBE. Slavin's letter in the March 1994 Education Leadership emphasizes that OBE is not mastery learning and that critics of OBE are misguided in using his 1987 study as evidence that OBE does not work. "In the absence of research, OBE proposals being made by various states and districts must be evaluated on their details. Certainly, the whole community should decide what schools or students should be held accountable for. Without the details of these proposals, I don't have a position on any of them, but I do know that my mastery learning review has nothing to do with the issue one way or the other." (Slavin, 1994).

[15]Ibid.

Slavin concentrates on group based ML at the K-12 level to the exclusion of studies at the college level and studies of Keller's PSI. In their estimate, Slavin's focus is on no more than 10% of the available evidence. In a response to Slavin (1990), Kulik et al. discuss 11 studies that fit Slavin's narrow focus. They find significant ML effects ($p < .10$) even using Slavin's calculations (though they caution that $n=11$ may not represent an adequate pool).

COOPERATIVE EDUCATION

Cooperative learning methods have been employed successfully in a variety of settings. Literature on cooperative methods in LEP classes is particularly well documented (see for example, Sutman et al., 1993; Johns & Espinoza, 1992; Holt, 1993); cooperative learning studies are also widely available for GT, At-risk, Disabled, and other student populations (Canter & Dawson, 1989; Fromboluti, 1988; Gallagher, 1993) and for specific curricula such as literature, english, math and science, etc. (Reid, 1992; Hirst & Slavik, 1989; Daiute & Dalton; 1992; Blosser, 1993). According to its proponents:

> ...cooperative learning experiences with heterogenous group of learners tend to promote higher achievement than competitive or individually structured learning experiences (Johnson et al., 1981; Johnson & Johnson, 1987). This has been found to be true across grade levels, subject areas, and different types of learning tasks.[16]

Cooperative models also tend to promote more positive relationships among diverse students (acceptance, support, trust and liking) and higher self esteem.

Slavin (1988) agrees that many of the remarkable claims made about cooperative education are true, but cautions that not all cooperative methods are created equal; to produce achievement gains, these methods must include both a group goal and individual accountability.[17]

PEER TUTORING

Peer tutoring is typically associated with even more substantial benefits than cooperative learning. Research indicates that peer tutoring benefits tutees, tutors and instructional staff; gains for tutors often outdistance those of students receiving help because tutors are forced to rework and simplify their own understanding of materials. Some researchers speculate that trained peer tutors are more effective than adults in teaching

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[16]Council for Exceptional Children, "Peer Support and Cooperative Learning for Accommodating Student Variance," ERIC Clearinghouse on Handicapped and Gifted Children (December 1989); 6.

[17]Slavin, Robert E., "Cooperative Learning and Student Achievement," Educational Leadership (October 1988); 31.

particular content.

Peer tutoring and peer "buddies" may also be effective in eliciting positive affective outcomes by including low-achieving and disabled students in extra-curricular and other school activities, thereby increasing feelings of self-esteem and self-worth.

Peer tutoring and cooperative education methods are often incorporated into OBE systems for the sake of developing positive affective outcomes (self-esteem, cooperation, etc.) and as methods to manage classroom variations in student learning levels (one criticism of Mastery Learning).

CASE STUDIES OF OBE[18]

In addition to the body of research on related concepts, there is some evidence that applies directly to OBE. Perhaps foremost among these is the 20-year experience of the Johnson City, NY schools with Albert Mamary's Outcomes-Driven Developmental Model (ODDM).[19]

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[18]It is not the authors intent to select only case studies that show effective use of OBE principles; however, no substantive examples of failures are evident in the mainstream literature. Several examples of OBE "failures" are cited in publications by fundamentalist christian groups, but for the most part these lack analytical rigor and in some cases academic integrity (People for the American Way, 1994). Christian right literature tends to focus on potential abuses of OBE theory and on examples of where their effort and arguments have led districts to abandon OBE.

Chicago is most often upheld as an example of OBE failure. "The Chicago Independent School District Board unanimously agreed to dump OBE when they found that, after investing $7.5 million over five years, their students were falling behind on standardized tests." (CEE, "Politically Correct Indoctrination?" in PAW, 1994). Beau Jones, former program coordinator in the Chicago Public Schools, claims that Mastery Learning Reading, not OBE, was implemented in schools (Jones, 1994). He also indicates that test scores did not drop as a result of the program; students still achieved at progressively higher levels from year to year. (Jones does not mention the cost of the program in his commentary--another criticism of the Chicago program).

[19]For additional information on several of the sites listed below as well as others, see Burns, R. "Models of Isntructional Organization: A Casebook on Mastery Learning and Outcome-Based Education," Far West Laboratory, San Francisco, CA (April 1987). Burns summarizes the successful practices of 10 high-profile Mastery Learning and OBE sites: Johnson City, NY; Red Bank, NJ; Mariner High School; Johnson Elementary; Conrad Ball Junior High School; Barcelona School; North Sanpete School District; George Dilworth

Johnson City, NY

Johnson City ranked last of 14 districts in its county (based on standardized tests) before ODDM was implemented in 1972. It is a lower-middle-class community with few professional citizens, a 20% poverty rate (based on percentage of kids who qualify for subsidized school lunch), and a sizable number of students with limited english proficiency. Since the inception of ODDM, Johnson City has seen its students' scores on standardized tests (California Achievemnet Tests--CATs) rise dramatically. In 1972, 45-50% of its students scored at or above grade level in reading and math. By 1977, the percentage was 70 and in 1984 the percentage ranged between 80 and 90. Johnson City student performance on the New York State Regents exams mirrored the CATs results. In 1989, Johnson City placed in the top 10 percent of schools statewide in percentage of students receiving Regents diplomas.[20] Other positive indicators include: Advanced Placement Exams (that students are taking them, which indicates increased enrollment in AP classes, and doing well); dropout rate has fallen to 3%; school vandalism budget is $200; and 80% enrollment in algebra 1 or higher in 9th grade.[21]

Pasco School District, Pasco, WA

Pasco School District implemented OBE with the assistance of John Champlin at the National Center for Outcome Based Education. A ten day teacher strike, the culmination of decades of race riots, board recalls and state investigation, was the catalyst for change. "Teachers saw themselves as victims of the conflict and unappreciated in trying to cope with the increasing needs of a growing population of poor (50%) and minority (50%) students. Pasco had reached a point where we were ready for change."[22]

Pasco's transformational process is credited with dramatic changes in the district:

> Today, despite a continued growth in at risk students, Pasco School District has been transformed into a district widely recognized for quality. Hundreds of people visit the district annually to see Outcome Based Education (OBE) in action and the district has

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Junior High School; and Cooper Mountain Elementary. Though data on student achievement is discussed for some sites, the emphasis is generally on implementation's affect on instructional delivery.

[20]Evans, K.M., & King, J.A., "Research on OBE: What We Don't Know," Educational Leadership (March 1994); 14.

[21]Mamary as quoted in Brandt, R., "On Creating an Environment Where All Students Learn. A Conversation with Al Mamary," Educational Leadership (March 1994); 24.

[22]Nyland, Larry, "One District's Journey to Success with Outcome-Based Education," Pasco School District (1991). (ERIC #ED341120); 2.

entered a partnership with the Washington Roundtable (a coalition of Washington's largest businesses) to measure and evaluate the transformational process. Teachers have a new enthusiasm for learning. As one teacher recently commented, "Outcome Based Education has renewed our hope in making a difference."[23]

Sparta School District, Sparta, IL

With technical assistance from Charles Bunke and Bill Spady, The Illinois State Board of Education embarked on an outcome-based approach to schooling in 1984. Before adopting the system, the Sparta School District was "just an average school district with below-average test scores." Staff morale was low due to strikes and financial problems.

The results of Sparta's 4 year experience with OBE has resulted in increases in standardized test scores, student grades, and student participation in extracurricular activities. Discipline problems and detention are down, and relations among students, staff and the community are positive. Sparta now hosts visitors who wish to view exemplary educational practices.[24]

New Canaan, CT

The Center School in New Canaan, CT enrolls 400 students from a generally middle-class community. The Center School organizes instructional groups around two criteria: group members have mastered prerequisites to learning new objectives; group members share a need to learn a specific objective. Data collected from the elementary school's math program indicate that the "schools delivery strategy enables all students to advance through the curriculum as rapidly as their aptitudes allow", with the following results[25]:

- No more than 1 or 2 students fail to reach grade level on standardized tests
- 10-20% of 6th graders complete the equivalent of the first half of Algebra I, and many complete the entire course
- Both fifth and sixth graders scored significantly above national averages on the Metropolitan Achievement Test in Mathematics.

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[23]Ibid.

[24]Brown, Alan S., "Outcome-Based Education: A Success Story," Educational Leadership (October 1988); 12. The people of Arlington Heights, IL also benefitted from state efforts to encourage OBE implementation (see Fitzpatrick, K., "Restructuring to Achieve Outcomes of Significance for All Students," Educational Leadership (May 1991); 18-22). However, Fitzpatrick's article focuses almost entirely on process and contains no indicators (or testimonials) of the results of implementation.

[25]Murphy, Carol, "Outcome-Based Instructional Systems: Primer and Practice," ERIC Education Brief, Far West Laboratory (1984); 8.

Prince George's County, MD

Prince George's county, MD contains schools with large populations of at-risk students. Columbia park elementary students, for example, are 95% black and largely from single-parent families; all but 10% receive some type of public assistance. School reform efforts, which included implementation of an outcomes-based system, resulted in dramatic improvement in student performance on national achievement measures such as the California Achievement Test (CAT). "Students throughout Prince George's County have made statistically significant gains on the CATs and have shown steady improvement on other pertinent achievement measures. At all grad level, overall CAT scores have increased 12 percentile points or more and the gap between black and white student's test scores has decreased substantially during the same period.[26]

Red Bank, NJ

Before implementation of OBE in Red Bank, NJ in 1985, expectations for minority students (60% of the population) were low. In addition, despite that Red Bank's per-pupil costs were in the 93rd percentile statewide, its student's achievement was among the lowest. Five years of OBE (1979-1984) saw student achievement on the Metropolitan Achievement Test rise well above the national norm (8.8) in all disciplines. Scores increased 2.7 points on average for the five tests (math, language, reading, science and social studies).[27] Rising test scores were unaffected by the growth in At-risk and minority students in the district over the same period.

Alhambra High School, Phoenix, AZ

Alhambra High School implemented OBE, as described by Spady, on a partial basis; 18 teachers representing various subject areas volunteered to reform their curricula and instructional methods. Participating teachers attributed substantial benefits to Spady's "High Success" methods, including increases in student attendance, motivation, self-esteem and confidence. Student grades also improved.[28]

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[26]Murphy, J., "Improving the Education of At-Risk Students. A System of Checks and Balances," Paper presented at the International Conference on the Effective Education of At-Risk Children and Youth, Washington, DC (February 1990); 2.

[27]Abrams, J., "Making Outcome-Based Education Work," Educational Leadership (September 1985); 30. For summary of test differentials see also, Burns, R., "Models of Learning and Outcome-Based Education," Far West Lab, San Francisco, CA (April 1987); 36-38.

[28]Briggs, D., "Alhambra High: A 'High Success' School," Educational Leadership (October 1988); 10-11.

Tempe Union High School, Tempe, AZ

OBE reform was implemented on a "micro" basis by three high school English teachers at Tempe Union H.S. who felt that too many of their students "drifted through with D's, never learning to express themselves clearly and correctly."[29] The teachers redefined the curriculum in terms of basic course outcomes and unit outcomes. The teachers also indicated that students would have several chances to achieve at minimum levels, including in-class remediation and re-testing and tutorials by staff outside of class; anyone achieving below 70% would receive an incomplete in the course.

> On that semester's final exam, the average score of students in the OBE sections was several percentage points higher than the average of those in non-OBE sections. At semester's end, not only was the unsatisfactory grade of D missing in our final reports, the number of failures was fewer than in previous years.[30]

Utah

Utah began implementing its own version of OBE, as embodied in its strategic plan "A Shift In Focus (SIF)," in 1985. The plan has been implemented through a combination of formula allocations and competitive grants. A 1991 study of OBE in Utah (Research and Development Consultants, 1991) is based on over 300 interviews with administrators, school board members, teachers, support staff and students, and on responses to three separate questionnaires. Interviews were conducted in all 40 districts; questionnaires were returned from 34 districts, 437 schools, and mover than 7,400 teachers. A large part of the analysis is reserved for OBE implementation and perceived effects of OBE. Educators were also asked to provide evidence of student achievement that could be attributed to OBE; eleven districts provided student achievement data. "Though the evidence is limited, it appears that districts with a higher level of implementation of OBE also demonstrate higher student achievement."[31] In addition, teachers perceived the following benefits to students:

- Higher achievement and grades
- Higher student self-esteem
- Better attitude toward school
- More students are becoming self directed learners
- More cooperation between students
- Better understanding of expectations

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[29]Buffington, M., Curd, B. & Lunt, O., "Organizing for Results in High School English," Educational Leadership (October 1988); 9.

[30]Ibid; 10.

[31]Research and Development Consultants, "OBE in Utah," Utah State Department of Education, Salt Lake City, UT (1991); 11.

- Better study habits and less waste of time
- Less fear of failure

Minnesota

Minnesota's vision of OBE sprang from the state legislature's Planning, Evaluating, and Reporting (PER) process in the mid 1970s. In 1983 the Minnesota Department of Education began developing a more complete vision for OBE in response to national reports such as "A Nation At Risk." Investigations at 10 project sites sought to document the perceived effects of OBE implementation on students (Bosma & King, 1992). Results from 37 schools during the 1990/91 school year indicate that 49% of respondents reported more and better learning; 43% reported increased student involvement; 35% reported different effects for different student types. Parents generally felt that OBE was beneficial for average and unmotivated students, but questioned the effect of OBE on the brightest students.

Missouri

Missouri's Statewide Project for Improving Student Achievement (PISA) includes three state-endorsed instructional programs, including Mastery Learning, Cooperative Learning, and Outcome-based Education. Changes in student achievement are measured on the Missouri Mastery Achievement Test (MMAT), a criterion referenced test. Since the implementation of PISA, scores on the MMAT have risen significantly in nearly every subject area. Scores on similar norm-referenced tests, including the Iowa Tests of Basic Skills (grade 2-8) and the Test of Achievement and Proficiency (9 and 10), have also increased.

Missouri educators point to the "Academic Achievement Demonstration Site" at the Thorpe Gordon Elementary School in Jefferson City as an example of how effective OBE can be. In just two years, a large majority of students at Thorpe Gordon moved from low rankings on the MMAT (40-60% in the bottom two quintiles) to much higher rankings (less than 10% in the bottom two quintiles; 70-90% in the top two quintiles).[32]

CRITICISM OF OBE

Criticisms of OBE are many. While proponents tend to focus on how OBE could work to focus education efforts around desirable outcomes, opponents emphasize how badly they believe the system will actually work in practice. Rather than strengthening education, OBE will place soft issues such as self-esteem above academics and standards will fall. In

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[32]Guskey et al., "The Thorpe Gordon School: A Model for Improvement," Principal (September 1991). Guskey characterizes the system as "a combination of mastery and cooperative learning."

addition, the sometimes fuzzy language used to define desirable outcomes ("globalism," "environmentalism," "multi-culturalism/diversity," etc.) leads some to believe that schools will be indoctrinating, rather than educating children.

What Outcomes?

OBE literature is rife with practical examples of how and why forming meaningful learner outcomes is a critical first activity in school reform. In 1992, Pease et al. compiled a list of OBE outcomes drawn from high profile OBE districts (Johnson City, NY; Glendale, AZ; Arlington Heights, IL; Rochester, MN), state departments of education, and national reports. The outcomes fell into six groups: two discipline groups (knowledge and application) and four areas of personal development (i.e. personal, social/civic, vocational, and physical).

It is largely that groups perceive affective outcomes as driving the curricula, rather than the other way around, that they object to OBE. For example, listing an outcome that requires children to "negotiate, compromise and help the group reach consensus" could be interpreted as promoting relativism as a desirable goal. This is antithetical to the absolute beliefs of some groups:

> They object to fostering the abilities to "compromise" and "reach consensus when such practices could lead in certain situations to capitulation to group pressure or to approval of behaviors that a Traditionalist interpretation of Christian Scriptures prohibits, such as homosexuality. They fear that their children's advocacy of moral absolutes, which preclude their having an attitude of "tolerance" or other secularly sanctioned "virtues," will detrimentally affect their children's grades and academic placement. They believe that their children will have to demonstrate politically correct behaviors, and that the goals, processes (such as group problem solving and cooperative learning), and evaluations used in OBE deliberately attempt to undermine their children's values, individuality, and commitment to personal responsibility.[33]

The focus on affective students outcomes is evident in both the grounding principles of OBE ("success influences self-concept; self-concept influences learning and behavior") and in specific outcomes. OBE language in all state, district, and school reform plans address affective outcomes to varying degrees.

Mamary refers to *attitudes* as being one of the three outcomes in ODDM (in addition to academics and work and process skills):

We want our kids to love learning, to be concerned about one another. Yes, we do

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[33]Burron, A. "Traditionalist Christians and OBE: What's the Problem?" Educational Leadership (March 1994); 73.

teach kids to show concern for one another. We know what we mean by that; we know what we mean by self-esteem; and we teach those things. But mostly, we develop such qualities through the environment. And we measure how well we're doing it with standards and indicators that are very clear. We do measure it--but we don't grade individuals on such outcomes.[34]

According to Mamary, it is ridiculous to grade affective outcomes:

Well, what are you going to do? Give a kid a failing grade for not loving learning? If you have the indicators, your job is to help develop that love of learning. To grade it would be self-defeating.[35]

Other Criticisms

Additional criticism of OBE includes:

- OBE "dumbs down" the curriculum so all students can master objectives.
- A "Back to Basics" (the three "R"s) approach is preferable.
- OBE places more emphasis on student effort and less on student achievement.
- Implementation of OBE is much more difficult that reformers anticipate and requires substantial effort, time, and training (Jamentz, 1994; Guskey, 1994).[36]
- Performance assessment techniques called for in the OBE process are imperfect and may not measure results accurately. Performance assessment research and techniques are not adequate for full implementation of OBE

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[34]Mamary, Al as quoted in Brandt, R., "On Creating an Environment Where All Students Learn: A Conversation with Al Mamary," Educational Leadership (March 1994); 27.

[35]Ibid., 28.

[36]Spady (Brandt, R. "On Outcome-Based Education: A Conversation with Bill Spady," Educational Leadership (Dec 1992/Jan 1993) claims that poor implementation ruined the name of "mastery learning." Spady predicted that OBE would be similarly affected. Capper & Jamison's 1992 study of OBE [Capper, C. & Jamison, M., "Outcomes based education re-examined: From structural functionalism to poststructuralism," Paper presented at the American Educational Research Association, Annual Meeting, S.F., CA (April 1992).] indicate that though OBE does seem to empower students and teachers, much of the system, as it is practiced in schools, continues to be lodged in a framework which aims toward structure and control (suggesting that implementation has not been true to OBE principles).

systems.[37]

The Religious Right

Fundamentalist groups have been particularly effective in attacking OBE and other school reforms. In addition to fears that OBE emphasizes affective outcomes (to the exclusion, apparently, of academic outcomes), groups like the Citizens for Excellence in Education (CEE) and the Pennsylvania Coalition for Academic Excellence incorporate an Orwellian specter of Government control into the debate.

According to the CEE,

> OBE requires students from kindergarten to the 12th grade to understand, accept and conform his/her thinking processes to particular state-mandated goals. ...OBE shifts the emphasis from learning subject matter to conformity to a particular image, that of global citizen.[38]

In Pat Robertson's words, the concept of Outcome-Based Education is

> ...nothing short of disaster...In other words, children do not get promoted in school unless they show the proper outcome, which has to do with their tolerance of homosexuals, their belief toward minorities or their answers to certain politically correct activities. And part of the brainwashing is to move them away from traditional moral values and Christian routes.[39]

Under OBE, according to some activists, the federal government will keep complete "Big Brother" files on students (though for what purpose is not clear). "Who owns the children?" is the questioned posed by Peg Luksik, founder of the Pennsylvania Parent's

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[37]All schools continue to use traditional criterion or norm-referenced tests to measure ability, since these are often required by states or for university admission. However, many schools have begun "portfolio assessments" to supplement traditional grading and scores (see, for example, Goals and Testing Commission, "Performance Based Education: Education Reform in Idaho Schools for 2000 and Beyond," Idaho State Department of Education; January 1993).

[38]CEE, "What Is Outcome--Based Education," Research compiled by Members of the CEE/Erie Task Force, CEE (February 1992) in PAW, "Religious Right Attacks on Outcome-Based Education and Other School Reforms," Information packet distributed by People for the American Way (PAW), 1994.

[39]Pat Robertson as quoted in PAW, "Religious Right Attacks on Outcome-Based Education and Other School Reforms," Information packet distributed by People for the American Way (PAW), 1994.

Commission, in her widely distributed video.

Analysts who study the religious right claim that for Christian activists OBE could not have come at a better time:

> OBE came on the scene as a custom-manufactured vehicle for highlighting many of what the Religious Right's leaders consider to be the vices of today's schools.[40]

Fundamentalist groups have been so effective in opposing OBE, in part, because a large number of main-stream parents share their concerns with the expanded role of schools in forming children's morals and attitudes.

> One does not have to be a zealot of the Religious Right to wonder who decided that public school bureaucrats--rather than parents and churches--should build children's self-worth and teach them what family and civic values are all about.[41]

However, Christian groups have often been caught in exaggerations that tend to detract validity from some of the arguments they make. However uncomfortable the mainstream is with some aspects of OBE, it is equally uncomfortable with the Christian right.

Scant evidence is given to back up many of the claims made against OBE. Arguments often center around potential abuses of OBE systems, rather than abuses that are actually occurring. Christian right literature tends to emphasize its own success in defeating OBE efforts, rather than giving concrete examples of how OBE has failed students.[42]

CONCLUSION

Like any system, Outcome-Based Education has the potential to be used or abused. In the hands of capable stewards, OBE has the potential to achieve meaningful reform and create a better learning environment; in the hands of scoundrels, it could be used to indoctrinate beliefs and decrease student achievement in traditional academic disciplines. Though preliminary evidence indicates that the former is the more likely result, several

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[40]Kaplan, G., "Shotgun Wedding: Notes on Public Education's Encounter With the New Christian Right," Phi Delta Kappan (May 1994); K6.

[41]Ibid.

[42]"Surrounded by controversy, OBE has been rejected by various school districts in Montana, Tennessee, Michigan and New Mexico. It was also taken out of Brownsville, PA where parents felt the children were learning less under the OBE system." (CEE, "Politically Correct Indoctrination?" in PAW, 1994).

problems remain with OBE, including the lack of a strong research base to back the movement.

The debate on OBE has been convoluted and confusing. Perhaps the greatest hindrance has been the inability of school personnel to effectively communicate the rationale for certain learner outcomes and describe how outcomes will be achieved, how they will be assessed, and how the systems will affect students.

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